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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/960,007

09/20/2001

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42390P10687

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08/04/2006

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EXAMINER

WONG, WARNER

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 08/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/960,007	<b>Applicant(s)</b> FEUERSTRAETER ET AL.	
	<b>Examiner</b> Wamer Wong	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28, 29, 32, 33, 37, 38, 41, 44, 45 and 48 is/are rejected.
- 7) ☒ Claim(s) 30, 31, 34-36, 39, 40, 42, 43, 46, 47 and 49 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Under the interim 101 Guidelines, the limitations to claims 41 and 48 of “machine accessible medium” and “machine” should be corrected to a standardized term of “computer-readable medium” and “computer” respectfully, which is also supported by the specification, paragraphs 22-23 on p. 7. Suggested changes to claims 41 and 48 are incorporated below.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 28-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Walsh (4,890,316).

**Regarding claim 28**, Walsh describes a method, comprising:

selecting a first frequency from a plurality of reference frequencies, configuring a first device to align with the first frequency, making a first attempt to phase lock the first device with an incoming data stream, if the first attempt succeeds, then generating a data rate signal corresponding to the first frequency; and if the first attempt does not

succeed, then selecting a second frequency of the plurality of reference frequencies, configuring the first device to align with the second frequency, making a second attempt to phase lock the first device with an incoming data stream, if the second attempt succeeds, then generating a data rate signal corresponding to the second frequency (col. 14, line 64 thru col. 15, line 9, transmitting modem (first device) initially selects and configures itself to 9600 bps (first frequency) to negotiate handshake (phase lock incoming data stream) with receiving modem. If successful, data signal of 9600 bps will be transmitted. If unsuccessful, it selects and configures itself to a second baud rate (e.g. 2400 bps) and re-attempts the handshaking process).

**Regarding claim 29,** Walsh describes:

configuring a second device to align with the reference frequency corresponding to the data rate signal (col. 14, line 64 thru col. 15, line 9, the receiving modem (second device aligns with the corresponding negotiated (reference) baud rate (frequency) of the handshake (data rate signal)).

**Regarding claim 32,** Walsh describes:

clocking an outgoing serial data signal in accordance with the frequency to which the second device is aligned (col. 18, lines 59-62, outgoing serial data signal is clocked at the negotiated baud rate (frequency)).

**Regarding claim 33,** Walsh describes:

selecting a first frequency from a plurality of reference frequencies, configuring a first device to align with the first frequency, making a first attempt to phase lock the first device with an incoming data stream; if the first attempt succeeds, then configuring a

second device to align with the first frequency; and if the first attempt does not succeed, then selecting a second frequency of the plurality of reference frequencies, configuring the first device to align with the second frequency, making a second attempt to phase lock the first device with an incoming data stream; if the second attempt succeeds, then configuring the second device to align with the second frequency (col. 14, line 64 thru col. 15, line 9, transmitting modem (first device) initially selects and configures itself to 9600 bps (first frequency) to negotiate handshake (phase lock incoming data stream) with receiving modem (second device). If successful, the receiving modem is configured to receive data signal of 9600 bps. If unsuccessful, the transmitting modem selects and configures itself to a second baud rate (e.g. 2400 bps) and re-attempts the handshaking process with the receiving modem).

**Regarding claim 37**, Walsh describes an apparatus comprising:

a first frequency selector to select a first frequency of a plurality of reference frequencies (col. 15, lines 1-9, modem's (first) frequency selecting process (selector) selecting highest transmitting baud rate);

a phase lock unit coupled with the first frequency selector to attempt to phase lock an incoming data stream with the first frequency (col. 15, lines 1-9, modem's handshaking process (phase lock unit) working (coupled) with the selecting process (selector) in transmitting and receiving handshakes (incoming data stream));

if the phase lock attempt fails, to signal the first frequency selector to select a second frequency of the plurality of reference clock frequencies (col. 15, lines 1-9, transmitting modem selects another (second) lower baud rate (frequency));

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a data rate select output coupled with the phase lock unit to generate a data rate signal corresponding to the reference frequency that the phase lock unit has successfully phase locked to the incoming data stream (fig. 1, modem's transmitter 102 (data rate select output) generating a data signal of the negotiated rate (reference frequency)).

**Regarding claim 38**, Walsh describes:

a data rate select input to receive the data rate signal (fig. 1, modem's receiver 103);

a second frequency selector coupled with the data rate select input to select the reference frequency corresponding to the data rate signal (col. 15, lines 1-9, when answering a call, modem's (second) frequency selecting process (selector) selecting its highest receiving baud rate);

an output clock control coupled with the second frequency selector to clock an outgoing data signal according to the reference frequency selected by the second frequency selector (fig. 1 & col. 15, lines 1-9, the modem accepts (selects) the received baud rate for clocking outgoing traffic);

**Regarding claim 41**, Walsh describes:

a ~~machine-accessible~~ computer-readable medium containing storing data that, when accessed by a ~~machine~~ computer, cause the ~~machine~~ computer to perform operations comprising:

selecting a first frequency from a plurality of reference frequencies, making a first attempt to phase lock the first frequency with an incoming data stream; if the first

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attempt succeeds, generating a data rate value corresponding to the first frequency; and if the first attempt does not succeed, then selecting a second frequency of the plurality of reference frequencies, making a second attempt to phase lock the second frequency with an incoming data stream, if the second attempt succeeds, generating a data rate value corresponding to the second frequency (col. 14, line 64 thru col. 15, line 9, transmitting modem (first device) initially selects and configures itself to 9600 bps (first frequency) to negotiate handshake (phase lock incoming data stream) with receiving modem. If successful, data signal of 9600 bps will be transmitted. If unsuccessful, it selects and configures itself to a second baud rate (e.g. 2400 bps) and re-attempts the handshaking process).

**Regarding claim 44**, Walsh describes a system:

a deserializer (transmit side & process of the modem) including,

a first frequency selector to select a first frequency of a plurality of reference frequencies (col. 15, lines 1-9, modem's (first) frequency selecting process (selector) selecting highest transmitting baud rate);

a phase lock unit coupled with the first frequency selector to attempt to phase lock an incoming data stream with the first frequency (col. 15, lines 1-9, modem's handshaking process (phase lock unit) working (coupled) with the selecting process (selector) in transmitting and receiving handshakes (incoming data stream));

if the phase lock attempt fails, to signal the first frequency selector to select a second frequency of the plurality of reference clock frequencies (col. 15, lines 1-9, transmitting modem selects another (second) lower baud rate (frequency));

a data rate select output coupled with the phase lock unit to generate a data rate signal corresponding to the reference frequency that the phase lock unit has successfully phase locked to the incoming data stream (fig. 1, modem's transmitter 102 (data rate select output) generating a data signal of the negotiated rate (reference frequency));

a transmission line to carry the incoming data stream, wherein the transmission line is optical fiber or metallic wire (fig. 1, telephone wire 115).

[It is noted that the word 'deserializer' may be equated to "the transmitting side/process of the modem" & need not be weighted by its definition as long as its claim limitations (functionality) is met. Should the claim be appended with claim limitations which describe "deserializing" the data, the claim may be rejected as a 103 rejection using Stuttard (US 4,270,202)].

**Regarding claim 45**, Stuttard describes:

a serializer (receiving side/process of the modem), including,

a data rate select input (fig. 1, modem's receiver 103);

a second frequency selector coupled with the data rate select input to select one of the plurality of reference frequencies, wherein the reference frequency selected is determined by a signal received at the data rate select input (col. 15, lines 1-9, when answering a call, modem's (second) frequency selecting process (selector) selecting its highest handshaked receiving baud rate);

an output clock control coupled with the second frequency selector to clock an outgoing data signal according to the reference frequency selected by the second



frequency selector (fig. 1 & col. 15, lines 1-9, the modem accepts (selects) the received baud rate for clocking outgoing traffic);

an interconnect from the data rate select output to the data rate select input to cause the signal received at the data rate select input to be the data rate signal (fig. 1 & col. 8, lines 55-68, interconnect 113 between the transmitter 102 (data rate select output) and receiver 103 (data rate select input) used for synchronization, passing the negotiated modem transmission rate (signal received at the data rate select input to be the data rate signal)).

[It is noted that the word 'serializer' may be equated to "the receiving side/process of the modem" & need not be weighted by its definition as long as its claim limitations (functionality) is met. Should the claim be appended with claim limitations which describe "serializing" the data, the claim may be rejected as a 103 rejection using Stuttard (US 4,270,202)].

**Regarding claim 48**, Walsh describes:

a ~~machine-accessible~~ computer-readable medium containing storing data that, when accessed by a ~~machine~~ computer, cause the ~~machine~~ computer to perform operations comprising:

selecting a first frequency from a plurality of reference frequencies, making a first attempt to phase lock the first frequency with an incoming data stream; if the first attempt succeeds, generating a data rate value corresponding to the first frequency; and if the first attempt does not succeed, then selecting a second frequency of the plurality of reference frequencies, making a second attempt to phase lock the second

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frequency with an incoming data stream, if the second attempt succeeds, generating a data rate value corresponding to the second frequency (col. 14, line 64 thru col. 15, line 9, transmitting modem (first device) initially selects and configures itself to 9600 bps (first frequency) to negotiate handshake (phase lock incoming data stream) with receiving modem. If successful, data signal of 9600 bps will be transmitted. If unsuccessful, it selects and configures itself to a second baud rate (e.g. 2400 bps) and re-attempts the handshaking process).

clocking an outgoing serial data signal in accordance with the frequency corresponding to the data rate value (col. 18, lines 59-62, outgoing serial data signal is clocked at the negotiated baud rate (data rate value));

a transmission line to carry the incoming data stream, wherein the transmission line is optical fiber or metallic wire (fig. 1, telephone wire 115).

### ***Allowable Subject Matter***

1. Claims 30-31, 34-36, 39-40, 42-43, 46-47 and 49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to describe the following conditions of the second device –

when initially aligned to a Local Area Network (LAN)/Wide Area Network (WAN) reference frequency and the new reference frequency becomes a Wide Area Network

(WAN)/Local Area Network (LAN) reference frequency, which corresponds to the new data rate signal, then aligning the second device with the reference frequency (i.e. autosensing LAN and WAN).

### ***Conclusion***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Samuels (US 2006/0159029).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Warner Wong whose telephone number is 571-272-8197. The examiner can normally be reached on 6:30AM - 3:00PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
RICKY Q. NGO  
SUPERVISORY PATENT EXAMINER

Warner Wong  
Examiner  
Art Unit 2616

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